



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE MORTALITY OF FOREIGN RACE STOCKS

A CONTRIBUTION TO THE QUANTITATIVE STUDY OF THE VIGOR OF THE
RACIAL ELEMENTS IN THE POPULATION OF THE UNITED STATES

By LOUIS I. DUBLIN, Ph. D., Statistician

METROPOLITAN LIFE INSURANCE COMPANY, NEW YORK

MY interest in this subject arose in connection with another study. Some eight years ago, I began to investigate the reasons for the increasing mortality of the American people after age 45. The mortality figures for the previous decade had shown that, while there had been very marked declines in the mortality rates of our population in infancy, in childhood, and in early adult life, that beginning with the age period 45 and continuing well into old age, there had been a slight increase in mortality. This was very puzzling because such conditions did not appear in England, in Germany, or in the Scandinavian countries for which comparable data were at hand. This was evidently a condition characteristic of America. Why should there be such an adverse change in the death rate during a period of extraordinary activity in public health and when so much was being done to improve the sanitary conditions of the country? Living and working conditions were undoubtedly getting better all the time for the great mass of the population. But these improvements were not being reflected in the facts of the death rate for middle life and beyond. After much labor on this problem, it finally occurred to me that the facts could, perhaps, be explained very simply as the result of the character of our recent immigration. My hypothesis was that, if the foreign stocks that had been coming into the country in increasing numbers actually had a higher death rate than the native stock at the older ages of life, that the very fact of their coming would be sufficient to account for the increase in mortality of the whole population.

To test this hypothesis, it was necessary to construct tables of mortality for the several race stocks, including the native born of native parentage, the native born of foreign or mixed parentage and the foreign born. For the last group, it was necessary also to prepare a table for each one of the important foreign nativity classes. I turned to the data for the State of New York where there was a large representation of the three groups of the population, where registration of deaths was

¹Read before the second International Congress of Eugenics, Sept. 21, 1921.

good, and where I was fairly familiar with the living and working conditions of the people. Data were for the year 1910. The results were published in the American Economic Review, Vol. VI, No. 3, 1916.² Later, assisted by Mr. G. W. Baker, I supplemented the findings for New York State with those for Pennsylvania.³

The following is a summary of our chief results. For more details, reference will have to be made to the two papers referred to above.

TABLE 1

Deaths per 1,000 white population among native born of native parentage, among native born of foreign or mixed parentage, and among foreign born, by sex and by age period: New York State, 1910.

Age Period	MALES			FEMALES		
	Native born of native parentage	Native born of foreign or mixed parentage	Foreign born	Native born of native parentage	Native born of foreign or mixed parentage	Foreign born
Ages 10 and over:						
Crude rate	13.8	13.2	17.5	12.4	9.7	16.6
Standardized rate	13.8	17.2	17.1	12.4	13.9	16.2
10-14	2.5	2.2	2.5	2.6	2.1	2.4
15-19	3.6	4.1	4.4	3.2	3.2	3.2
20-24	5.0	6.8	5.2	4.7	5.2	4.0
25-44	6.9	14.3	8.7	5.7	9.3	7.3
45-64	18.8	28.2	28.0	14.3	20.0	23.4
65-84	77.3	89.9	90.4	68.2	73.9	87.7
85 and over	268.9	323.0	272.7	242.3	324.9	270.5

Table 1 presents a comparison of the actual facts of mortality in three principal classes according to nativity in the population of New York State in 1910. In both sexes, the death rates of the foreign born and of their native born offspring are considerably in excess of those for the native born of native parents after the period of middle life is reached. There is little difference during the periods of childhood, of adolescence, and of early life; but there the similarity ceases. The excess mortality of the foreign stock reaches its maximum at about age 60 and continues to the end of life but to a less degree. In the important age period 45 to 64, the death rate of males (28.0) was 49 per cent. higher than that for native males of native parentage and that for foreign born females was 64 per cent. higher than for females of native stock. Similar conditions exist in the State of Pennsylvania.

In view of the fact that the foreign born and their native offspring make up a considerable proportion of the total population of both New York (63.9 per cent.) and Pennsylvania (43.5 per cent.), there is no room for doubt that our explanation of the increasing mortality

² Factors in American Mortality. A Study of Death Rates in the Race Stocks of New York State, 1910.

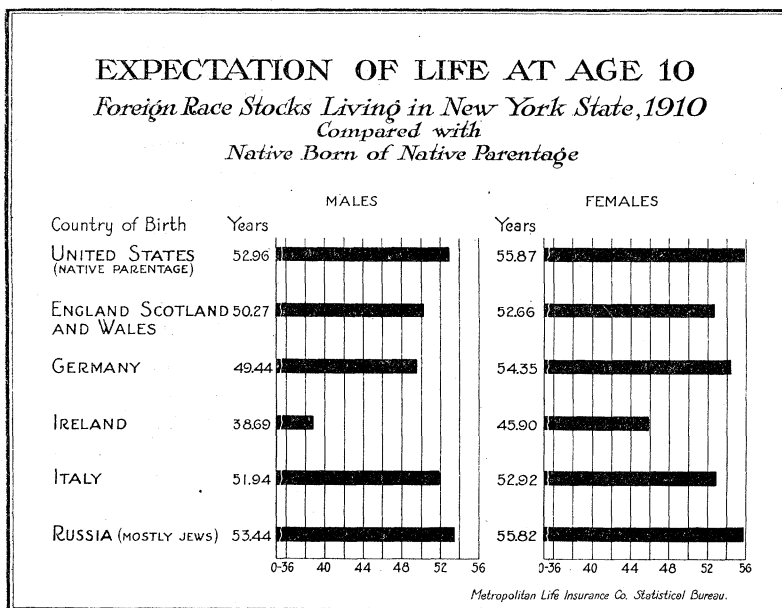
³ The Mortality of Race Stocks in Pennsylvania and New York. Quarterly Publications American Statistical Association, March, 1920.

after age 45 is correct. The foreign born enter the United States, for the most part, as adults; they have lower vitality than the native stock and their addition to the population can have only one effect, namely, to increase the death rate at the middle ages of life and at the older ages.

Our problem today, however, is somewhat different. I propose to give you the results of our investigations with especial reference to the relative vigor of the several race groups that make up our newer immigration. Obviously, that is what will interest you as eugenists concerned as you are with the character and potentialities of the various groups which are making the American of the future.

To determine the relative vitality of the several race stocks, we constructed a series of life tables from the facts of mortality already referred to. There is no better test; for they tell us the average after lifetime of each group. The figures of expectation were calculated beginning at age 10 in each case because of the small number of foreign born persons living in New York State below this age. The figures for the five principal foreign races are given in the following charts, the countries of foreign birth being arranged alphabetically. The expectations for those born in the United States of native parentage are given for comparison.

With the exception of the Russian born, the native males of native parentage have a greater expectation at age 10 than any of the foreign groups. In New York State, the Russians are almost entirely Jews who are noted for their longevity. At age 10, the expectation



of Russian born males is 53.44 years, as compared with 52.96 years for native males of native parentage. Similar conditions have been described by various observers for Jews living in Germany, Russia and Hungary. They invariably have lower death rates and longer expectation of life than do the people among whom they live. Their addition to the population of New York State has, therefore, an effect very different from that of the other foreign peoples. They increase the longevity of the total population rather than decrease it. Next in order of longevity are the Italian males with a life span of nearly 52 years at age 10; next are the English, Scotch and Welsh, 50.27 years; the Germans, 49.44 years; and the Irish, 38.69 years. The surprising fact of this chart is the very low life expectation of the Irish males. It is actually two years less than the expectation of negro males living in the Registration States at the same age. We shall attempt later to give some of the causes which are responsible for very unfavorable conditions in this race.

Among foreign born females, very similar conditions appear. The greatest expectation is found among Russian born females, who, at age 10, have an average after lifetime of 55.82 years. This is almost identical with the expectation of females of native stock. Then follow in the order named the females born in Germany, Italy, England,

TABLE 2

Expectation of life at selected ages. By sex, for persons born in specified country and living in New York State, 1910:

Sex; country of birth	10	20	40	60
<i>Males:</i> Living in New York State, 1910, Born in:				
United States (native parentage)...	52.96	44.80	29.22	14.92
England, Scotland and Wales....	50.27	42.23	26.79	13.78
Germany	49.44	40.80	25.51	13.25
Ireland	38.60	31.35	18.16	11.25
Italy	51.94	44.26	28.75	15.08
Russia (mostly Jews).....	53.44	44.84	27.85	13.95
Living in specified country:				
England and Wales, 1910-1912....	53.08	44.21	27.74	13.78
Scotland, 1911.....	51.86	43.27	27.25	13.54
Germany, 1901-1910.....	51.16	42.56	26.64	13.14
Italy, 1901-1910.....	51.25	43.00	28.00	13.67
<i>Females:</i> Living in New York State, 1910, Born in:				
United States (native parentage)...	55.87	47.55	31.57	16.30
England, Scotland and Wales.....	52.66	44.01	28.17	14.86
Germany	54.35	45.57	29.31	14.60
Ireland	45.90	37.40	22.20	11.30
Italy	52.92	44.94	29.68	15.66
Russia (mostly Jews).....	55.82	46.60	29.84	14.73
Living in specified country:				
England and Wales, 1910-1912....	55.91	47.10	30.30	15.48
Scotland, 1911.....	53.83	45.35	29.48	15.17
Germany, 1901-1910.....	53.35	44.84	29.16	14.17
Italy, 1901-1910.....	51.50	43.67	29.00	13.92

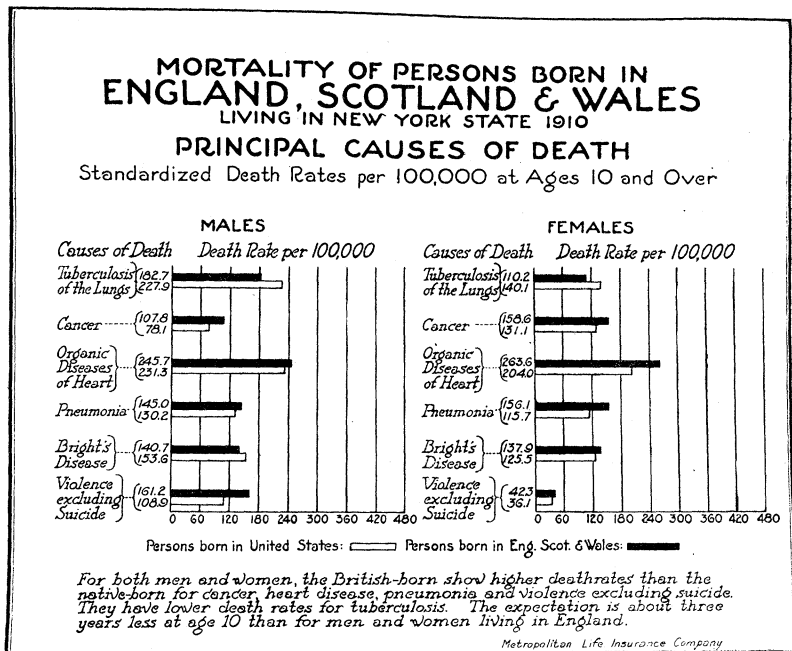
Scotland and Wales, and Ireland. In every case, the expectation of life for females is in excess of that for males of the same nativity group. The excess varies from seven years among the Irish to only about one year among the Italians.

The following table shows similarly the facts of the expectation at other age periods than 10 for each one of the foreign race stocks as compared with the native born of native parentage:

In view of the interest that attaches to the several race stocks, we present a chart for each of them which shows the facts of mortality for the principal causes of death.

ENGLISH, SCOTCH AND WELSH

The mortality rates of the British are among the most favorable in Europe. Their addition to the population of New York State might, therefore, be expected to be a favorable one. Yet, as we have seen, the expectation of life of both males and females of this nativity falls from two to three years short of that of the native stock at age 10. The fact is that the expectation of the British living in New York State is about three years less than for men and women living in England. Among the several causes of death, we find higher death rates among the British born for cancer, organic heart disease, pneumonia and violence. They have lower death rates for tuberculosis. The differences are never very great and it is difficult to single out any particular cause of death as especially responsible for the conditions described. For our purposes, however, it is important to remember that the



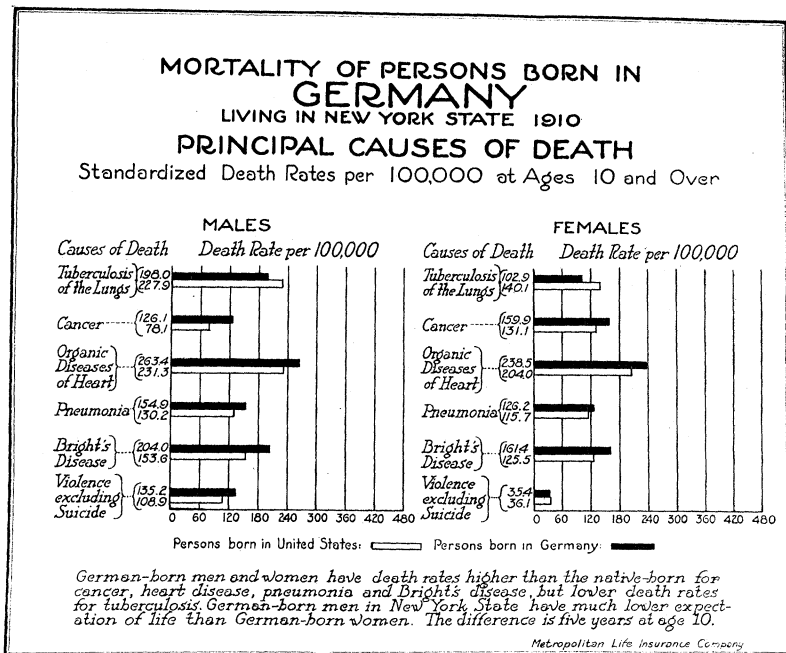
British immigrant living in New York State does not show up as favorably either as do his own people in his native country or as the native stock in the United States.

Immigration from England, Scotland and Wales into the State of New York has been of minor importance in recent years. In 1910, there were only 193,359 of these foreign born people in New York State, constituting 7.1 per cent. of the foreign born and only 2.2 per cent. of the total white population of the state.

GERMANS

The Germans constitute a very much larger group of the foreign stock in this state. In 1910, there were 436,874 German born persons, constituting 16.0 per cent. of the foreign born whites and 4.9 per cent. of the total white population.

In this group, the males show up much worse than do the females. The longevity of males, as measured by the life tables at age 10, is fully three and one-half years less than that of native males of native parentage; while the German born females have an expectation only one and one-half years less than that of females of native stock. With the exception of tuberculosis, German born men and women have higher death rates than the native born for all important causes of death. The so-called degenerative diseases play a very important part in their high mortality. Heart disease and Bright's disease both show excessive rates among males and females. Cancer is also much



higher among them than in the native population. Suicide is also an important element, although not shown in the chart. The mortality characteristics of the German born living in New York State recall similar facts for the native population of Germany, but to an exaggerated degree. The mortality rates of Germans living in their native country have shown remarkable improvement during the decades prior to the war and were among the most favorable in Europe. German males living in New York State showed an expectation of life almost two years less at age 10 and considerably higher death rates for the principal causes than are found for the Germans in their own country.

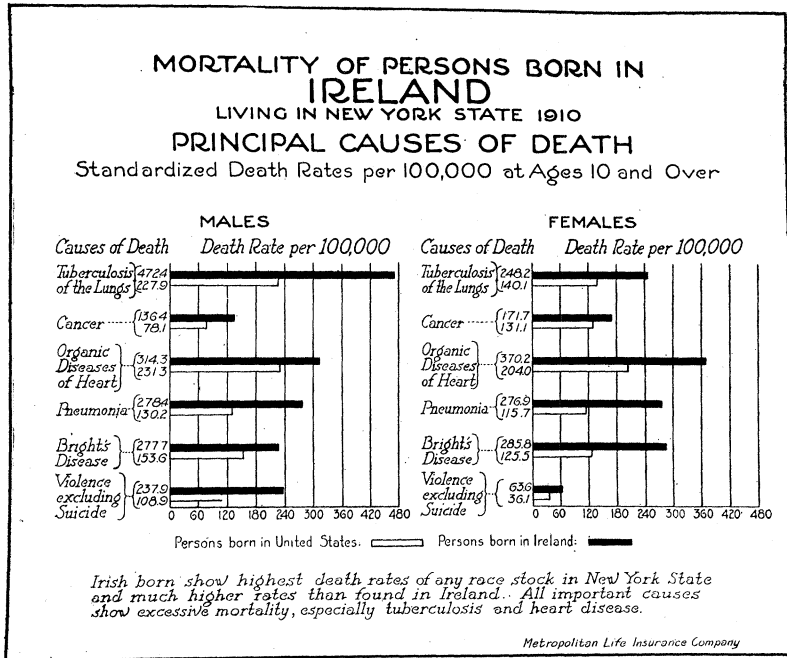
IRISH

The Irish living in New York State present a very serious situation from the standpoint of longevity. They form an important part of the population, representing in 1910, 13.5 of the total foreign born and 4.1 per cent. of the total white population of the state. The high point in the immigration of this race was reached long ago, so that today we must consider not only those who were born abroad but their native born children as well. The Irish stock in New York State in 1910, thus considered, comprised 12.2 per cent. of the total white population in 1910.

A very high death rate is coupled with the numerical importance of this race. The effect on the mortality condition of the entire population is, therefore, considerable. As shown in Chart 1, the longevity as measured by the expectation of both Irish born males and females is least of any of the foreign stocks listed. Striking excesses of mortality exist. Thus, Irish males at the age period 25 to 44 have a death rate of 18.5 per thousand, or nearly three times that for native males of native parentage (6.9 per thousand). Irish born females at the same age period show a rate of 12.0 per thousand, much less than for Irish males, but nearly twice that of native females of native parentage. Taking all ages 10 and over together and with due regard to the differences of age distribution, we find that the standardized death rates for both Irish males and females are about twice that for natives of native parentage.

The following chart shows that these results follow from an excessive mortality from every principal cause of death, but especially so from tuberculosis, pneumonia, and violence:

It is difficult to understand these facts in view of the rather favorable mortality condition of the Irish in their own country. The figures for those living in New York State are not far from twice as high as those reported by the Registrar General of Ireland for the more important age periods of life. The factors which produce these differences will repay further study.



ITALIANS

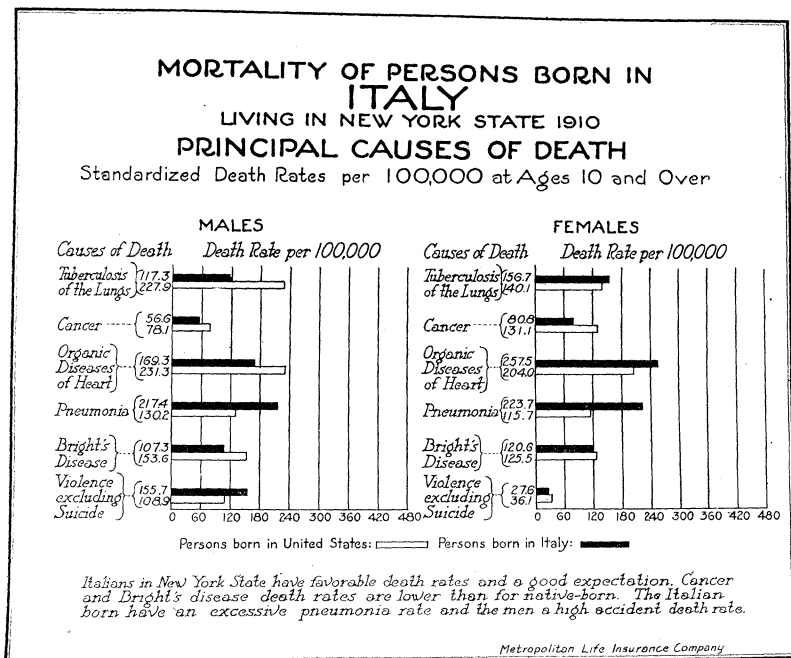
The Italians have very favorable death rates in New York State and enjoy a good expectation. In this respect, the Italian born males show up relatively better than do the females. Among the males, we observe especially low rates for tuberculosis, cancer, heart disease and Bright's disease. On the other hand, they have higher death rates from pneumonia and violence, both of which may well reflect the hazards peculiar to their occupations.

Italian born females, unlike the males, have relatively high death rates from tuberculosis of the lungs and organic heart disease. Like the males, they have high pneumonia rates. The figures indicate that the conditions of life in New York State are not particularly favorable for Italian women in spite of a good endowment of bodily vigor.

It is important to note that in spite of the marked change in the environmental conditions in New York State as compared with their native country, which, for the large majority of the Italian immigrants is the warm south, the Italian born live longer and suffer less from most serious diseases in their new abode than in their home country.

According to the 1910 census, the number of persons of Italian birth in New York State was 472,192. This was 17.3 per cent. of the foreign born whites and 5.3 per cent. of the total white population. This number is large in view of the recent date at which the Italian immigration began. A steady stream of this nativity may be

expected to come to the United States. Their addition to the population from the point of view of longevity involves little, if any, loss to the total population.

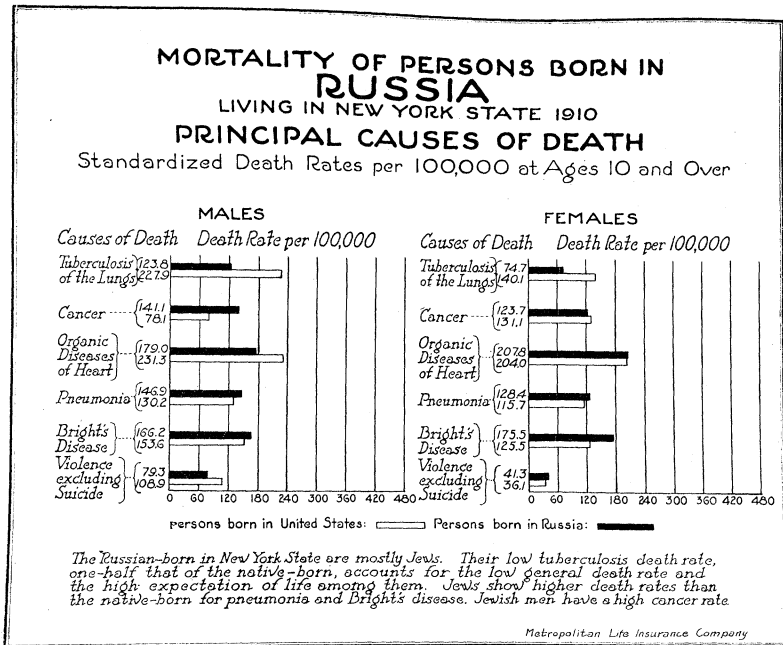


RUSSIANS

The Russian born living in New York State form the largest group among the foreign stocks studied. In 1910, there were 558,952, or 20.5 per cent. of the total foreign born and 6.2 per cent. of the total white population. Although no absolutely trustworthy figures are available, it is obvious that in New York State, the Russian born are, for the most part, Jews, and it is this fact that explains the very low death rate and greater longevity which the Russian born enjoy. As shown in Chart 1, both males and females of this race have an expectation as good as the native born of native parentage; in fact, the males are slightly better than the native stock. The full significance of this fact appears when we consider the very favorable conditions of life of this people in their new environment. They are, for the most part, relatively newcomers and, many of them are still suffering from the difficulties arising out of poor housing and of bad economic status incidental to a period of adjustment in a new country. This fact again bears out what is generally known—that the Jews as a people have extraordinary vigor.

As shown in Chart 6, these Russian born in New York State have very much lower death rates from pulmonary tuberculosis than is found among the native born. In the age period 25 to 44, for example,

males show a tuberculosis death rate of 117.1 per 100,000, as compared with 352 among natives. Females, likewise, at this same age period, show a tuberculosis death rate a little more than one-half that of native born females. It is this favorable condition as to tuberculosis which almost by itself explains the favorable mortality which is observed in this race. On the other hand, Bright's disease is higher among these people, especially in the later age periods. Likewise cancer has an excessive death rate among males. The low death rate from violent causes points to the absence of hazard in the occupations engaged in by them.



SUMMARY AND CONCLUSION

We may, therefore, conclude that:

1. The several races that make up the foreign born population of New York are variable as to their natural vigor as measured by their mortality rates or by life tables.
2. With the exception of the Russians, who are, for the most part, Jews, the expectation of life of the foreign born is less than for the native born of native parentage.
3. Of the foreign born, Russians have the best expectation followed in order by the Italians, the English, Scotch and Welsh, the Germans, and the Irish. The last have a particularly low expectation.
4. With the exception of the Russians and Italians, the mortality

is higher among these races living in New York State than in their native country.

5. This condition may be due to the difficulties of adjustment to new conditions of life; or to the poorer quality of the immigrants as compared with their own people who stay at home, or to a combination of both these factors.